

CLAIMS

1. (Previously presented) A system, comprising:
 - a support;
 - a projector attached to the support;
 - an accelerometer to measure tilt and rotation; and
 - a controller coupled to the accelerometer to predistort image data responsive to the tilt and the rotation such that the predistorted image data projects an undistorted keystone corrected image on a projection surface not perpendicular to a projection axis.
2. (Original) The system of claim 1 where the accelerometer is a two dimensional accelerometer.
3. (Original) The system of claim 1 where the controller calculates a horizontal angle responsive to the tilt and rotation.
4. (Previously presented) The system of claim 1 where the system projects the predistorted image data as an undistorted image displaying no keystone distortion on the projection surface.
5. (Previously presented) A system, comprising:
 - a support means, the support means comprising a base and a platform;
 - a projection means attached to the support means;
 - a single position detecting means for detecting first and second positions; and
 - predistortion means for predistorting image data responsive to the first and second positions such that the predistorted image data projects an undistorted keystone distortion corrected image on a projection surface not perpendicular to a projection axis.

6. (Original) The system of claim 5 where the position detecting means is an accelerometer.
7. (Original) The system of claim 6 where the accelerometer is a two-dimensional accelerometer.
8. (Original) The system of claim 6 where the accelerometer is an inertial accelerometer.
9. (Original) The system of claim 6
where the accelerometer generates a tilt signal indicative of vertical tilt; and
where the accelerometer generates a rotation signal indicative of a horizontal rotation.
10. (Previously presented) A method, comprising:

automatically detecting a projector's position in two dimensions using a two dimensional accelerometer, where the projector is attached to a support, the support comprising a base and a platform;

predistorting image data responsive to the projector's position such that the predistorted image data projects a projected image without keystone distortion on a projection surface not perpendicular to a projection axis.
11. (Original) The method of claim 10 where automatically detecting a projector's position includes automatically detecting vertical tilt and horizontal rotation.
12. (Previously presented) The method of claim 11 comprising calculating vertical and horizontal rotation angles from the vertical tilt and horizontal rotation.

13. (Cancelled)
14. (Cancelled)
15. (Original) The method of claim 10 where automatically detecting a projector's position includes using an inertial accelerometer.
16. (Previously presented) The system of claim 1, where the support comprises:
a base; and
a platform.
17. (Previously presented) The system of claim 16, where the base comprises:
a curved wall; and
at least one channel.
18. (Previously presented) The system of claim 17, where the base is movably coupled to the platform such that the platform rides up and down the curved wall on the at least one channel.
19. (Previously presented) The system of claim 16, where the base is movably coupled to the platform to allow the platform to horizontally rotate about a center axis.
20. (Previously presented) The system of claim 1, where the support comprises at least one motor.
21. (Currently amended) The system of claim 20, where the controller is further to
~~electronics in the projector~~ discern a rotation angle by reading motor steps.
22. (Previously presented) The system of claim 1, where the support is removably coupled to the projector.